

U.S. Patent Application Serial No. 10/501,331
Amendment filed August 31, 2009
Reply to OA dated June 15, 2009

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): A disk apparatus that performs information reproduction by irradiating a laser beam onto a disk recording medium rotated in a CAV system, comprising:

a ~~determining means~~ determiner for determining a reference reproduction laser power value by subjecting said disk recording medium to a test writing and a test reading at a first reference linear velocity;

a ~~specifying means~~ specifier for specifying a linear velocity coefficient on the basis of a current ambient temperature of said disk recording medium and a current linear velocity at a portion to which said laser beam is currently irradiated; and

a ~~calculating means~~ calculator for calculating an optimal reproduction laser power value obtained by multiplying the reference reproduction laser power value determined by said ~~determining means~~ determiner by the optimal linear velocity coefficient specified by said ~~specifying means~~ specifier, wherein,

said ~~specifying means~~ specifier specifies said linear velocity coefficient by use of a first relational expression indicative of a relationship between the ambient temperature of said disk

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recording medium at a second reference linear velocity and a linear velocity coefficient, and a second relational expression indicative of a relationship between said linear velocity coefficient and said current linear velocity.

Claims 2-3 (Canceled)

Claim 4 (Previously Presented): A disk apparatus according to claim 1, wherein said reference reproduction laser power value is obtained by adding a predetermined proportion of a lower limit reproducible laser power value by which said disk recording medium can be reproduced at least to said lower limit reproducible laser power value.

Claim 5 (Previously Presented): A disk apparatus according to claim 1, wherein said reference reproduction laser power value is obtained by subtracting a predetermined proportion of an upper limit reproducible laser power value by which said disk recording medium can be reproduced at most from said upper limit reproducible laser power value.

Claim 6 (Previously Presented): A disk apparatus according to claim 1, wherein said first reference linear velocity is a linear velocity of an innermost periphery in a ZCAV system.

Claim 7 (Previously Presented): A disk apparatus according to claim 1, wherein said second

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reference linear velocity is a linear velocity of an outermost periphery in the ZCAV system.

Claim 8 (Original): A disk apparatus according to claim 1, wherein said first relational expression is an expression for decreasing a value of said linear velocity coefficient as said ambient temperature increases.